The listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently Amended) A semiconductor device comprising:

an antenna, antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal;

an integrated circuit comprising a thin film transistor, transistor;

- a light-emitting element, and
- a light-receiving element configured to receive a second optical signal; and
- a light-emitting element configured to transmit a third optical signal,

wherein the light-emitting element and the light-receiving element each have a layer for conducting photoelectric conversion using a non-single crystal thin film, and

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit.

2. (Currently Amended) A semiconductor device comprising:

an antenna, antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal;

an integrated circuit comprising a thin film transistor, transistor;

- a light-emitting element, and
- a light-receiving element configured to receive a second optical signal; and
- a light-emitting element configured to transmit a third optical signal,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed integrally.

- 3. (Currently Amended) A semiconductor device comprising:
- an antenna, antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal;
  - an integrated circuit comprising a thin film transistor, transistor;
  - a light-emitting element, and
  - a light-receiving element configured to receive a second optical signal; and
  - a light-emitting element configured to transmit a third optical signal,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit, and

wherein the antenna, the integrated circuit, the light-emitting element and the light-receiving element are formed integrally.

- 4. (Currently Amended) A semiconductor device comprising:
- an integrated circuit, circuit;
- a light-emitting element, and
- a light-receiving element configured to receive a first optical signal; and
- a light-emitting element configured to transmit a second optical signal,

wherein the integrated circuit comprises a connection terminal, a rectification circuit that generates power supply voltage from an alternating current signal that is input to the connection terminal by an antenna, a demodulation circuit for demodulating [[a]] the first optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a second third signal,

wherein the light-emitting element can convert converts the second third signal to [[an]] the second optical signal, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed integrally.

5. (Currently Amended) A semiconductor device comprising:

an antenna, antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal;

an integrated circuit comprising a thin film transistor, transistor;

- a light-emitting element, and
- a light-receiving element configured to receive a second optical signal; and
- a light-emitting element configured to transmit a third optical signal,

wherein the light-emitting element and the light-receiving element each have a layer for conducting photoelectric conversion using a non-single crystal thin film,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed over a first substrate and then separated therefrom, and attached to a second substrate.

6. (Currently Amended) A semiconductor device comprising:

an antenna, antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal;

an integrated circuit comprising a thin film transistor, transistor;

- a light-emitting element, and
- a light-receiving element configured to receive a second optical signal; and
- a light-emitting element configured to transmit a third optical signal,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed over a first substrate and then separated therefrom, and attached to a second substrate.

- 7. (Currently Amended) A semiconductor device comprising:
- an antenna, antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal;
  - an integrated circuit comprising a thin film transistor, transistor;
  - a light-emitting element, and
  - a light-receiving element configured to receive a second optical signal; and
  - a light-emitting element configured to transmit a third optical signal,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit, and

wherein the antenna, the integrated circuit, the light-emitting element and the light-receiving element are formed over a first substrate and then separated therefrom, and attached to a second substrate.

- 8. (Currently Amended) A semiconductor device comprising:
- an integrated circuit, circuit;
- a light-emitting element, and
- a light-receiving element configured to receive a first optical signal; and
- a light-emitting element configured to transmit a second optical signal,

wherein the integrated circuit comprises a connection terminal, a rectification circuit that generates power supply voltage from an alternating current signal that is input to the connection terminal by an antenna, a demodulation circuit for demodulating [[a]] the first optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a second third signal,

wherein the light-emitting element can convert converts the second third signal to [[an]] the second optical signal,

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wherein the integrated circuit, the light-emitting element and the light-receiving element are formed integrally, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed over a first substrate and then separated therefrom, and attached to a second substrate.

- 9. (Original) A semiconductor device according to any one of Claims 5 to 8, wherein the first substrate is a glass substrate and the second substrate is a plastic substrate.
  - 10. (Currently Amended) An IC card comprising:

an antenna, antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal;

an integrated circuit comprising a thin film transistor, transistor;

- a light-emitting element, and
- a light-receiving element configured to receive a second optical signal; and
- a light-emitting element configured to transmit a third optical signal,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed integrally.

- 11. (Original) An IC card according to claim 10, wherein the antenna, the integrated circuit, the light-emitting element and the light-receiving element are formed integrally.
  - 12. (Currently Amended) An IC card comprising: an integrated circuit, circuit;

- a light-emitting element, and
- a light-receiving element configured to receive a first optical signal; and
- a light-emitting element configured to transmit a second optical signal,

wherein the integrated circuit comprises a connection terminal, a rectification circuit that generates power supply voltage from an alternating current signal that is input to the connection terminal by an antenna, a demodulation circuit for demodulating [[a]] the first optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a second third signal,

wherein the light-emitting element can convert converts the second third signal to [[an]] the second optical signal, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed integrally.

## 13. (Currently Amended) An IC card comprising:

an antenna, antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal;

- an integrated circuit comprising a thin film transistor, transistor;
- a light-emitting element, and
- a light-receiving element configured to receive a second optical signal; and
- a light-emitting element configured to transmit a third optical signal,

wherein the antenna, the light-emitting element and the light-receiving element are electrically connected to the integrated circuit, and

wherein the integrated circuit, the light-emitting element and the light-receiving element are formed over a first substrate and then separated therefrom, and attached to a second substrate.

- 14. (Currently Amended) An IC card according to claim 13, wherein the antenna, antenna and the integrated eircuit, circuit in addition to the light-emitting element and the light-receiving element are formed over [[a]] the first substrate and then separated therefrom, and attached to [[a]] the second substrate.
- 15. (Original) An IC card according to claim 12, wherein the integrated circuit, the light-emitting element and the light-receiving element are formed over a first substrate and then separated therefrom, and attached to a second substrate.
- 16. (Original) The IC card according to any one of Claims 13 to 15, wherein the first substrate is a glass substrate and the second substrate is a plastic substrate.